

Listing of the claims:

Claims 1-26 (Canceled)

Claim 27 (Previously Presented) A container suitable for containing liquid and having at least one controlled deflection flex panel for accommodating pressure change induced in the container, said flex panel having longitudinal and transverse extents defining a plane of said flex panel, said flex panel having a flexure region positioned towards a first longitudinal end of said flex panel and a flexure initiator region positioned towards an opposing end of said flex panel, said flexure initiator region having a lesser amount of arc projecting away from said plane than said flexure region, said regions merging together within the panel so that said initiator region can flex inwardly relative to said plane in response to pressure changes, wherein in response to pressure changes the amount of arc changes, and causes said flexure region to progressively flex in response to increasing pressure change in the container.

Claim 28 (Previously Presented): A container as claimed in claim 27 which has a longitudinal axis and said flexure region projects outwardly in a transverse direction relative to said longitudinal axis.

Claim 29 (Previously Presented): A container as claimed in claim 27 in which said flexing of said flexure region results in an outward curvature of said flexure region lessening.

Claim 30 (Previously Presented): A container as claimed in claim 27 wherein said initiator region merges smoothly with said flexure region and said regions vary in outwardly projecting extent along an axis of said container.

Claim 31 (Previously Presented): A container as claimed in claim 27 wherein said initiator region merges smoothly with said flexure region and progressively varies in outwardly projecting extent from said initiator region to said flexure region.

Claim 32 (Previously Presented): A container as claimed in claim 27 wherein said flexure region varies in transversely radiating extent along an axis of said container.

Claim 33 (Previously Presented): A container as claimed in claim 27 wherein said initiator region varies in transversely radiating extent along an axis of said container.

Claim 34 (Previously Presented): A container as claimed in claim 28 in which a projection of said flexure region extends inwardly relative to said longitudinal axis of said container.

Claim 35 (Previously Presented): A container as claimed in claim 29 in which the initiator region inverts so as to reverse in curvature in response to vacuum pressure change within said container.

Claim 36 (Previously Presented): A container as claimed in claim 29 in which said flexure region inverts so as to reverse in curvature in response to vacuum pressure change within said container.

Claim 37 (Previously Presented): A container having a longitudinal axis, said container adapted to contain liquid at a temperature elevated above room temperature, said container including a wall with at least one invertible flexible panel, said flexible panel being adapted to flex upon a changing of internal pressure during a changing of temperature of said liquid, said flexible panel having at least one projecting region, projecting in a direction from a plane disposed relative to said longitudinal axis, said projecting region having an amount of arc, said projecting region positioned towards a first longitudinal end of said flexible panel, said flexible panel further including at least one initiator region displaced relative to said projecting region towards an opposing longitudinal end, said initiator region having a lesser amount of arc in said direction, whereby in use, said initiator region is adapted to reverse relative to the direction of its projection thereby causing said projecting region to reverse relative to the direction of its

projection.

Claim 38 (Previously Presented): A container as claimed in claim 37, wherein said flexible panel is adapted to flex inwardly upon a lowering of internal pressure during a cooling of said liquid.

Claim 39 (Currently Amended): A container as claimed in claim 37, wherein the flex panel projection is projects in an outward direction relative to said plane.

Claim 40 (Cancelled)

Claim 41 (Previously Presented): A container as claimed in claim 37 wherein the initiator region includes regions of minimal projection relative to said flexure region.

Claim 42 (Previously Presented): A container as claimed in claim 37, wherein said flexible panel is adapted to flex outwardly in use upon a raising of internal pressure during a heating of said liquid.

Claims 43 (withdrawn): A container as claimed in claim 42, wherein the projection is in an inward direction relative to said plane.

Claims 44 (withdrawn): A container as claimed in claim 43, wherein the flexible panel is substantially arcuate and the curvature of the initiator portion is less than that of the remainder of the flexible panel.

Claims 45 (withdrawn): A thin-walled container having a longitudinal axis, said container formed from a plastics material and adapted to contain liquid at a temperature elevated above room temperature, said container including: an upper portion which includes a sealable closure receiving portion; a lower portion including a base closing the bottom of the container; and a wall extending between said upper and lower portions, said wall being generally tubular in shape and including at least one elongated, vertically

oriented vacuum panel, said vacuum panel being adapted to flex inwardly upon a lowering of internal pressure during cooling of said liquid said vacuum panel including a connecting portion and an elongated outwardly projecting portion, said connecting portion connecting said outwardly projecting portion to said wall, said connecting portion being adapted to flex inwardly upon lowering of internal pressure during cooling of said liquid, said outwardly projecting portion including an initiator portion, said initiator portion including a substantially flattened portion and a raised portion, said flattened portion connecting said connecting portion to said raised portion, said raised portion projecting outwardly to a lesser extent than the remainder of said outwardly projecting portion, whereby in use, increased vacuum pressure causes said flattened portion to curve inwardly, thereby causing said raised portion to reverse in curvature, thereby causing said outwardly projecting portion to reverse in curvature.

Claims 46 (withdrawn): A thin-walled container as claimed in claim 45 wherein said vacuum panel including a connecting portion, said connecting portion connecting said outwardly projecting portion to said well said connecting portion being adapted to flex inwardly upon lowering of internal pressure during cooling of said liquid and said flattened portion connecting said connecting portion to said raised portion.

Claim 47(Previously Presented): A container having at least one controlled deflection flex panel said flex panel having longitudinal and transverse extents defining a plane of said flex panel, said flex panel having an initiator region having an arc of a predetermined extent of transverse projection away from said plane, and a first and second flexure region of a greater extent of transverse projection extending longitudinally away from said initiator region, said first flexure region extending towards a first end of said flex panel, and said second flexure region extending towards an opposing end of said flex panel, said initiator region being displaced nearer the centre of the flex panel than either longitudinal end, whereby flex panel deflection occurs in a controlled and progressive manner in response to changing container pressure.

Claim 48 (Previously Presented): A container adapted to contain liquid at a temperature elevated above room temperature, said container including a wall with a controlled deflection flex panel having a portion with an initiator region having an amount of arc of a predetermined extent of projection and a longitudinally displaced flexure region having a progressively increasing amount of arc longitudinally extending away from said initiator region, said wall being outwardly bowed between said regions, whereby flex panel deflection occurs progressively between said regions in a controlled manner in response to changing container pressure.

Claims 49 (withdrawn): A container including a controlled deflection flex panel having an initiator region including a predetermined extent of inward projection and flexure region having an outward projection, the flexure region extending longitudinally away from said initiator region, whereby flex panel deflection occurs in a controlled manner in response to changing container pressure.

Claims 50 (withdrawn): A container adapted to contain liquid at a temperature elevated above room temperature, said container having a wall including a controlled deflection flex panel having a portion with an initiator region having a predetermined extent of inward projection and a flexure region having a progressively increasing extent of inward projection in the longitudinal direction extending away from said initiator region, said wall being inwardly bowed between said regions, whereby flex panel deflection occurs progressively between said regions in a controlled manner in response to changing container pressure.

Claim 51 (Previously Presented): A container as claimed in claim 47, including a pair of substantially inflexible regions between which said initiator region and said first and second flexure region extend.

Claim 52 (Previously Presented): A container having a controlled deflection flex panel as claimed in claim 51, wherein the initiator region and flexure regions are substantially

arcuate.

Claim 53 (Canceled)

Claim 54 (Canceled)

Claim 55 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 52, wherein the initiator region and flexure region includes two panel portions meeting at an apex.

Claim 56 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 52, wherein the initiator region includes two panel portions meeting at an apex.

Claim 57 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 52, wherein the flexure region includes two panel portions meeting at an apex.

Claim 58 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 53, wherein the initiator region and flexure region includes two panel portions meeting at an apex.

Claim 59 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 53, wherein the initiator region includes two panel portions meeting at an apex.

Claim 60 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 53, wherein the flexure region includes two panel portions meeting at an apex.

Claim 61 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 54, wherein the initiator region and flexure region includes two panel portions meeting at an apex.

Claim 62 (withdrawn): A container having a controlled deflection flex panel as claimed

in claim 54, wherein the initiator region includes two panel portions meeting at an apex.

Claim 63 (withdrawn): A container having a controlled deflection flex panel as claimed in claim 54, wherein the flexure region includes two panel portions meeting at an apex.

Claim 64 (Canceled)

Claim 65 (Previously Presented) A biaxially oriented plastic container having a longitudinal axis, comprising: a neck defining a mouth, a shoulder portion joined with said neck portion and extending downward therefrom, a bottom portion forming a base of the container; a side wall extending between and joining said shoulder portion with said bottom portion, said side wall having at least one controlled deflection flex panel for accommodating pressure change induced in the container; said flex panel having a first flexure region positioned toward a first longitudinal end of said flex panel, a second flexure region positioned toward the opposing end of said flex panel, and a flexure initiator region positioned between said first and second flexure regions, said first and second flexure regions having an outward curvature in cross-section, said flexure initiator region having a lesser outward projection of curvature in cross-section, said flexure initiator region being located nearer the longitudinal centre of the flex panel than either end, said regions merging together so that said initiator region can flex inwardly in response to pressure changes and cause said flexure regions to progressively flex in response to increasing pressure change in the container.

Claim 66 (Previously Presented): A container according to claim 65 having more than one vacuum panel.

Claim 67 (Previously Presented): A container according to claim 65 having a plurality of said vacuum panels spaced apart and separated by land areas.

Claim 68 (Previously Presented) A hot-fill blow molded plastic container having at least

one controlled deflection flex panel for accommodating vacuum induced in the container, said flex panel having longitudinal and transverse extents, said flex panel having a flexure region with a longitudinally variable transverse curvature and a continuous flexure initiator region having a lesser amount of arc of transverse curvature longitudinally displaced from the flexure region, said curvatures smoothly merging together longitudinally so that motion of said flexure initiator region in response to vacuum is transferred to said flexure region for longitudinally progressively flexing said flexure region in response to increasing vacuum in the container.

Claim 69 (withdrawn): A container according to claim 51 wherein a flattened region extends between said inflexible regions to provide a middle portion of said initiator region.

Claim 70 (withdrawn): A container as claimed in claim 37 wherein the initiator portion includes regions of opposite projection relative to said projecting portion

Claim 71 (Canceled)

Claim 72 (Canceled)

Claim 73 (Canceled)

Claim 74 (Canceled)

Claim 75 (Canceled)

Claim 76 (Canceled)

Claim 77 (Previously Presented): A container for containing liquid and having at least one controlled deflection flex panel for accommodating pressure change induced in the container, said flex panel having longitudinal and transverse extents defining a plane of said flex panel, said flex panel having a flexure region positioned towards a first longitudinal end of said flex panel and a flexure initiator region positioned towards an opposing end of said flex panel, said flexure region having an arc projecting away from said plane, and said flexure initiator region having an arc of a lesser amount projecting away from said plane than said flexure region, said regions merging together so that said

initiator region can flex inwardly relative to said plane in response to pressure changes and cause said flexure region to progressively flex in response to increasing pressure change in the container.

Claim 78 (Previously Presented): A container as claimed in claim 65, said flex panel including a pair of opposing ends and a pair of opposing sides, said flex panel including a pair of opposing land areas, said land areas being located at said opposing sides.

Claim 79 (Previously Presented): A container as claimed in claim 78, including two or more flex panel portions, said flex panel portions being located at opposing sides of said land areas.

Claim 80 (Withdrawn): A container as claimed in claim 78, including at least one initiator region displaced between two flexure regions, said flexure regions varying in extent of outward projection.

Claim 81 (Previously Presented) A thin walled, plastic container for containing a liquid filled initially in a hot state and then sealed, the container having a longitudinal axis and including a plurality of vacuum panels, each adjacent pair of vacuum panels being spaced apart from each other by a first land area, each vacuum panel including an upper end and a lower end, each vacuum panel including an upper area adjacent the upper end, the upper area having an amount of arc projecting away from a plane normal to the container longitudinal axis, and a lower area adjacent the lower end, the lower area having a lesser amount of arc projecting away from said plane.

Claim 82 (Previously Presented) A thin walled, plastic container for containing a liquid filled initially in a hot state and then sealed, the container having a longitudinal axis and including a plurality of vacuum panels, each adjacent pair of vacuum panels being spaced apart from each other by a first land area, each vacuum panel including an upper end and a lower end, each vacuum panel including an upper area adjacent the upper end, the upper

area having an amount of arc projecting away from a plane normal to the container longitudinal axis, and a lower area adjacent the lower end, the lower area having a greater amount of arc projecting away from said plane.

Claim 83 (New) A container suitable for containing liquid and having at least one controlled deflection flex panel for accommodating pressure change induced in the container, said flex panel having longitudinal and transverse extents defining a plane of said flex panel, said flex panel having a flexure region, projecting in a direction away from said plane, and a flexure initiator region positioned longitudinally away from said flexure region, said flexure initiator region also projecting in said direction away from said plane, said flexure initiator region having a lesser amount of arc projecting away from said plane than said flexure region, said regions merging together within the panel so that said initiator region can flex inwardly relative to said plane in response to pressure changes, wherein in response to pressure changes the amount of arc changes, and causes said flexure region to progressively flex in response to increasing pressure change in the container.

Claim 84 (New) A container as claimed in claim 83, wherein said flexure region is positioned towards a longitudinal end of said flex panel.

Claim 85 (New) A container as claimed in claim 83, wherein said initiator region is positioned towards a longitudinal end of said flex panel.

Claim 86 (New) A container suitable for containing liquid, having an opening to receive said liquid and having at least one controlled deflection flex panel for accommodating pressure change induced in the container, said container having a longitudinal axis, said flex panel having longitudinal and transverse extents relative to said longitudinal axis and defining a plane of said flex panel, said flex panel having an upper end relative to the opening of said container, said flex panel having a flexure region near said upper end having an outward bow projecting away from said flex panel, and a flexure initiator

Serial Number: 09/689,957

region displaced longitudinally away from said upper end having a flatter outward bow projecting away from said flex panel, whereby flex panel deflection occurs progressively between said regions in a controlled manner in response to changing container pressure.